

TITOV, Ivan Andreyevich, prof.; SIZREBRYAKOVA, T.I., red.; KUZNETSOV, P.A., red., izd-va; YEZHOVA, L.L., tekhn.red.

[Interrelation between plant communities and environmental conditions; development of geobotanical systems] Vzaïmo-deistvie rastitel'nykh soobshchestv i uslovii sredy; problema razvitiia georastitel'nykh sistem. Izd.2. Moskva, Gos.izd-vo "Vysshiaia shkola," 1961. 518 p. (MIRA 14:4)
(Botany--Ecology)

S/113/60/000/010/009/014
D270/D301

AUTHOR: Titov, I.D.

TITLE: Automatic equipment for knocking out cylinder block castings

PERIODICAL: Avtomobil'naya promyshlennost', no. 10, 1960, 34

TEXT: In 1959 the iron foundry of the Moskovskiy avtozavod imeni Likhacheva (Moscow Automobile Plant imeni Likhachev) developed an automatic installation for knocking out cylinder block castings (see Figure). Mold boxes with poured castings enter on the conveyor 1 and are pushed by the ram 2 onto the knock-out installation 3. A chain conveyor 4 moves them to the table 5 under a monorail 6. The box is removed after the sand has been shaken out by the incoming new box. The unloader 7 removes the upper part of the mold box, which is then placed on the belt conveyor 8. The latter transports it to the molding machine. An electric hoist 9, traveling on the monorail 6 up to the overhead conveyor 10, removes the casting to the cleaning section. The freed lower part of the molding box is mo-

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ved by conveyor 8 to the molding machine. After the transfer of the mold box from conveyor 1 to the knock-out grid 3, the bottom cover of the mold box remains on the conveyor trolley 1 and moves to the second pusher 11, which transfers it to the roller conveyor 12. This cover then falls onto the belt conveyor 13, from which it is pushed out by the ram 14. The above installation enabled thin-walled but heavy mold boxes weighing over 120 kg to be knocked out. There is 1 figure.

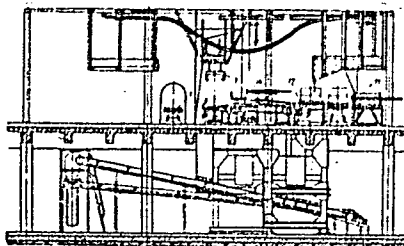
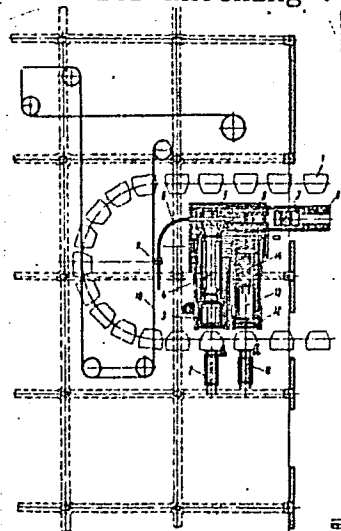
ASSOCIATION: Moskovskiy avtozavod imeni Likhacheva (Moscow Automobile Plant imeni Likhachev)

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Automatic equipment for knocking ...

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D270/D301

Fig.



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TITOV, I.G., polkovnik med.sluzhby (Leningrad)

Acute attack of glaucoma and transitory myopia following a
dose of disulfan. Oft.zhur. 14 no.3:148-150 '59.
(MIRA 12:6)

(GLAUCOMA)

(SULFANILANILIDE)

TITOV, I.S.

Lacrymal Organs--Surgery

Surgical treatment of contraction and dislocation of the inferior lacrymal points.
Vest. oft. 30, no. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, MARCH 1952 ~~1953~~, Uncl.

TITOV, I.I., inzh.

Design and field work in *grading* land for irrigation purposes.
Gidr. 1 mol. 12 no.9:3-14 S '60. (MIRA 13:9)
(Crinea--Earthwork) (Irrigation)

TITOV, Ilie N.

The Ianos Herbak Plant, Cluj. Industria usoara 9 no.7:281-284
Jl '62.

FEDOROV, A.V.; TITOV, I.P.

Present state and future development of pond fish culture
in Voronezh Province. Trudy sov. Ikht. kom. no.14:140-141
'62. (MIRA 15:12)

1. Voronezhskiy gosudarstvennyy universitet i Upravleniya
promyshlennosti prodovol'stvennykh tovarov Voronezhskogo
oblastnogo ispolnitel'nogo komiteta.
(Voronezh Province--Fish culture)

KOMAROV, A.R.; KHAZOVA, A.V.; TITOV, I.V.

Modification of cast iron by magnesium under pressure. Avt. prom.
no.3:40-43 Mr '59. (MIRA 12:5)

1.Ger'kovskiy avtozaved i Nauchno-issledovatel'skiy institut
tekhniki avtomobil'noy promyshlennosti.
(Cast iron) (Magnesium)

12(2)

SOV/113-59-3-13/17

AUTHORS: Komarov, A.R.; Khazova, A.V.; Titov, I.V.

TITLE: The Modification of Cast Iron by Using Magnesium Under Pressure (Modifitsirovaniye chuguna magniyem pod davleniyem)

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 3, pp 40 - 43 (USSR)

ABSTRACT: The imperfection of methods for introducing magnesium and other modifying additions to liquid cast iron is one of the reasons why high-strength cast iron has found no wide-spread use. In the USSR, pure metallic magnesium, its alloys or magnesium-containing mixtures are used as modifiers. The author reviews briefly the different methods used in the USSR. At the Gor'kovskiy avtozavod (Gor'-kiy Automobile Plant) the modification with pure magnesium was performed under a bell-shaped chamber with a special device providing a sufficiently deep penetration of the magnesium into the liquid

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The Modification of Cast Iron by Using Magnesium Under Pressure

metal as shown by Figure 1. This method had the disadvantage that the magnesium consumption is up to 1% of the weight of cast iron and it does not reliably provide high-strength cast iron with globular graphite structure. At the Syzranskiy gidroturbinnyy zavod (Syzran Hydraulic Turbine Plant) a method was developed using a forehearth furnace as shown by Figure 2. The magnesium consumption amounts to only 0.4 - 0.6% of the cast iron weight, while the assimilation of the magnesium is up to 10 - 15% compared to 5 - 10% with the first method. However, the operation of the furnace is interrupted and the use of the forehearth capacity is limited to 50 - 60%. At a number of plants, devices for introducing magnesium were tested, whereby a rotat-

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ing crucible with a special chamber was used which was connected with the interior cavity by a special canal. The device (Figure 3), designed at the Gor'kiy Automobile Plant, may serve as an example for this type. Thereby, a magnesium assimilation of 20 - 25% was obtained. Recently, methods were developed which were based on increasing the evaporation temperature of magnesium by increasing the pressure on the metal surface in hermetic devices. Figures 5 and 6 show examples of such devices. The latter was developed by TsNIITMASH. Figure 7 shows a device designed by the Czech engineer Otahal. He established that the amount of magnesium required for modifying cast iron is considerably lower at a pressure of 5 - 5.5 atm. In this case, the amount of magnesium required is only 0.2% of the weight of the cast iron as shown by a graph (Figure 8). NIITAvtoprom investigated the cast iron modification by magnesium when the cast iron crankshafts of the automobile "Volga" were introduced, and de-

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veloped the laboratory device shown in Figure 9. It consists of an airtight chamber into which the crucible with the liquid cast iron is placed. The magnesium is pushed into the liquid cast iron by a bar from the cover of the chamber. The latter is filled with compressed air which was varied during the tests from 3 to 8 atm, while the metal temperature was 1420°. For all tests, amounts of magnesium equal to 0.2% of the weight of the cast iron were used. According to the graph, Figure 10, the best results were obtained at a pressure of 5 - 6 atm, since then the air pressure was about equal to the pressure of saturated magnesium vapors whereby also a thorough mixing of the metals was obtained. Based on the experiments of NIITAvtoprom, two projects were developed. One, constructed by NIITAvtoprom itself, is shown by Figure 11. With this equipment, the modification of 500 kg cast iron lasts 1 - 1.5 minutes. The other version was developed by the Gor'kiy Automobile Plant and is

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shown by Figure 12. This equipment consists of a cylindrical chamber 1,500 mm in diameter and 3,000 mm long. The crucible containing 500 kg of liquid cast iron is placed on a small truck which is pulled by an electric winch into the interior of the chamber. The chamber entrance is closed by an airtight spherical door. Another opening is located at the top of the chamber, also closed by an airtight door, for introducing the container with the magnesium. A pneumatic cylinder is used for pushing the charge into the liquid metal. The chamber is filled with compressed air at a pressure of 6 atm, whereby 6 cu m compressed air are required. The modification process lasts about 1.5 - 2 minutes and the entire operation 4 - 5 minutes. The liquid iron is transferred to the casting crucible, where 0.3% pulverized 75%-ferrosilicon and 0.025% cryolith are added for reducing the sulfur content. By melting cast iron in an electric arc furnace with basic lining and by modification with magnesium, it is possible

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to obtain high-strength cast iron with a structure of globular graphite. The consumption of pure magnesium is thereby 0.06 - 0.08% of the weight of the liquid cast iron. When the sulfur content of cast iron is 0.003 - 0.005% and 0.002 - 0.003% after the modification, then it is adequate to have a magnesium content of 0.01 - 0.03% for obtaining cast iron with globular graphite. The modification equipment of the Gor'kiy Automobile Plant is used for the production of crankshafts of the "Volga" automobile and shows good results, thus it may be recommended for mass production of high-strength cast iron parts. There are 3 photographs, 7 diagrams, 2 graphs, 1 table and 5 Soviet references.

ASSOCIATION: NIIT Avtoprom, Gor'kovskiy avtozavod (Gor'kiy Automobile Plant)

Card 6/6

TIKOV, I. V.

GINSBURG, R. A., TIKOV, I. V. "Air disinfection by 'corona discharge'", Izvdy Tsentr. nauch. -issled. dezinfekts. in-ta, Issue 5, 1949, p. 37-42.

SO: U-4631, 16 Sept 53, (Letopis 'Zhurnal 'vykt Staty, No. 24, 1949).

CH

Hastening gaseous cementation and nitriding. D. O. Slavin and L. V. Titov. U.S.S.R. 64,104, Feb. 28, 1945. The gas is passed through an ionization chamber before its entry into the cementation furnace. M. Hosh

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CLASSIFICATION

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REMARKS

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TITOV, K.; KOZHUKH, S., ekonomist

Participation of volunteers helps. Fin. SSSR 37 no.8:81-83
Ag '63. (MIRA 16:9)
(Auditing and inspection)

TITOV, K.

Thousands of volunteer inspectors and economists. Fin.SSSR 37
no.2:49-51 F '63. (MIRA 16:2)

1. Glavnyy revizor Upravleniya gosudarstvennykh dokhodov
Ministerstva finansov RSFSR.
(Auditing and inspection)

1. TITOV, K. S.
2. USSR (600)
4. Lathes
7. Mechanization of labor-consuming operations, Podshipnik, No. 4, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953. Uncl.

USSR / General and Special Zoology. Insects. Insect
and Mite Pests.

P

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54320.

Author : Titov, K. G.

Inst : Leningrad Agriculture Institute.

Title : The Principal Pests of Seed Plants of the Mustard
Family Cultures Under the Conditions of Leningrad-
skaya Oblast Control Methods.

Orig Pub: Zap. leningr. s.-kh. in-ta, 1956, vyp. 11, 403-411.

Abstract: The chief pests are: the rape blossom eater (*Meligethes aeneus* F.) (B) and the seed snout beetle (*Ceutorrhynchus assimilis*) (S). During the period of feeding and mass egg laying (B) migrates from wild vegetation to the seed plants during their budding and blossoming. The damage is slight from the beetles feeding on pollen. It is also slight

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USSR / General and Special Zoology. Insects. Insect
and Mite Pests.

P

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54320.

Abstract: from the infestation of the buds and blossoms with 1-2 larva of (B). The greatest damage is caused by a more common infestation of the top buds and blossoms of the main branches by 3-7 larvae. As the result the buds dry out and drop off. (S) causes the chief damage when it is in the larval stage. Feeding on unripe seeds, the larvae become reduced in number and weight in the pods. The means of controlling the above-mentioned pests are identical: dusting of the root and the stumps with the mixture of DDT and hexachlorocyclohexane (2:1 by weight) during the application of the mixture into the furrow or into the hole at the rate of 2 g for each seed plant. In case of a mass appearance of the pests, it is recommended to dust the plants during

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USSR / General and Special Zoology. Insects. Insect
and Mite Pests.

P

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54320.

Abstract: the period of budding with the same mixture at the
rate of 25-30 kg/ha. and again during the phase of
the pod formation, if necessary. -- A. P. Adrianov.

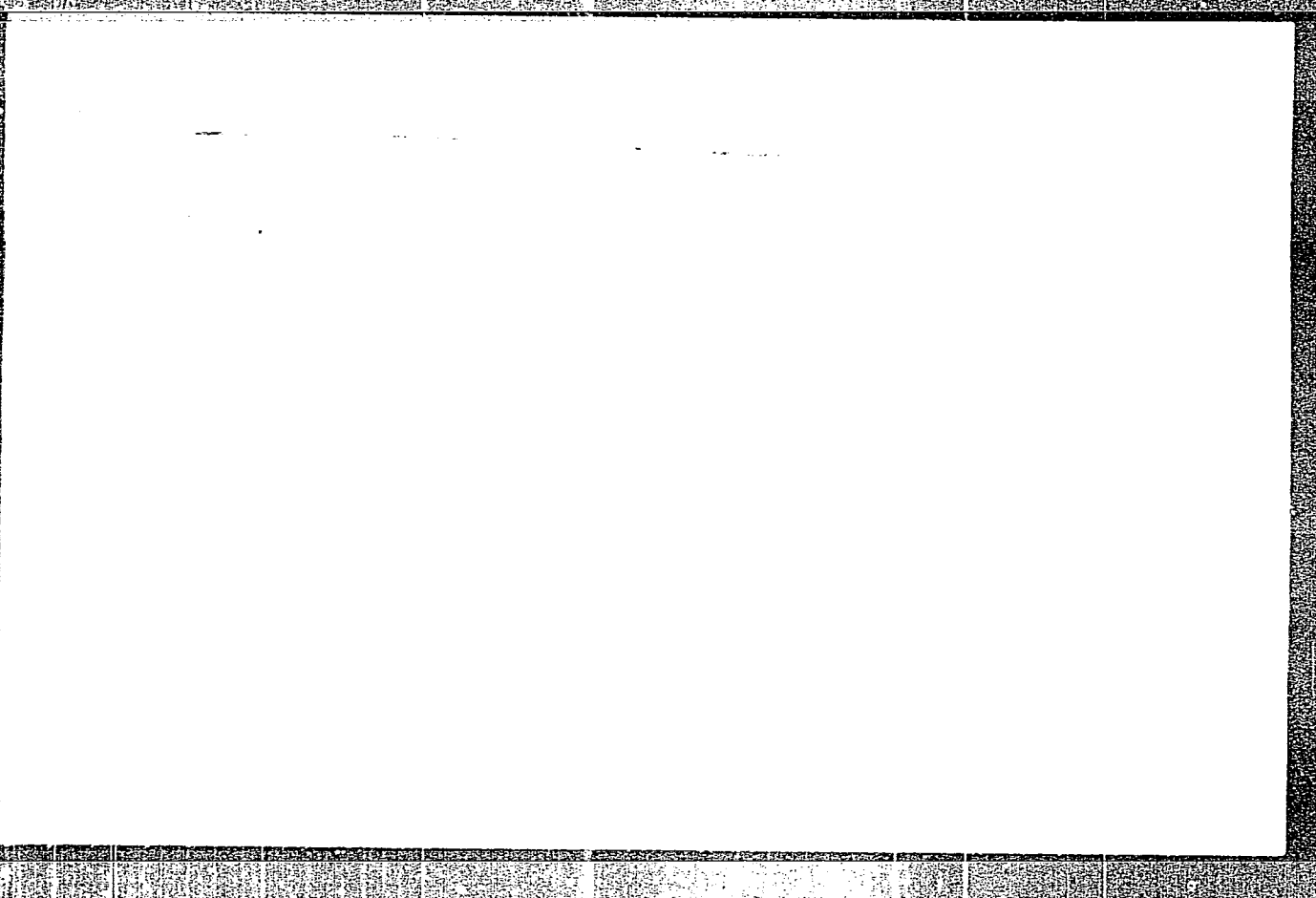
Card 3/3

TITOV, N.G., Cand Agr Sci--(diss) "Insects ^{which cause} ~~which cause~~ damage to the
crops of the cruciferous of vegetable crops, and ^{the} ~~the~~ effect of measures
of combatting them under conditions of the Leningrad Oblast."
Len, 1958. 23 pp (Fin. of Agr USSR. Len Agr Inst), 100 copies
(KL, 22-53, 112)

-14-

"APPROVED FOR RELEASE: 07/16/2001

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Titov, K.G.

KASSIRSKIY, I.A. professor, zasluzhennyy deyatel' nauki; ALEKSEYEV, G.A.
professor.

"Leucoses in children". K.G. Titov. Reviewed by I.A. Kassirskii,
G.A. Alekseev. Pediatrics, no.5:89-92 S-0 '55. (MLRA 9:2)
(LEUCOSIS) (CHILDREN-DISEASES) (TITOV, K.G.)

TITOV, K.G., professor

Functions of megakaryocytes. Probl.gemat. i perel.krovi 1 no.2;
30-33 Mr-Ap '56. (MLRA 10:1)

1. Iz kafedry detskikh bolezney (zav. - prof. K.G.Titov) Tashkentskogo
meditsinskogo instituta.
(BLOOD PLATELETS
megakaryocytes, funct.)

TITOV, K.G.; MAKSUDOV, A.M., otv.red.; CHERNYAVSKAYA, A.B., red.izd-vs;
GOR'KOVAYA, Z.P., tekhn.red.

[Importance of studies of the reticulo-endothelial cells of
the bone marrow in experiments and in clinical work with
children] Znachenie issledovaniia retikulo-endotelial'nykh
kletok kostnogo mozga v klinike u detei i v eksperimente.
Tashkent, Izd-vo Akad.nauk Uzbekskoi SSR, 1959. 158 p.

(MIRA 12:9)

(RETICULO-ENDOTHELIAL SYSTEM) (MARROW)

ZHARIKOV, Ya.P., nauchnyy sotrudnik; NOVOSELOV, V.S., nauchnyy sotrudnik;
RUSIASHVILI, I.L., kand. sel'skokhoz. nauk; GOGUADZE, M.N.;
EMERIKH, F.D.; FEDOROVA, L.I.; TITOV, K.G., kand. sel'skokhoz.
nauk

Brief information. Zashch. rast. ot vred. i bol. 9 no.2:
56-57 '64. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut l'na
(for Novoselov). 2. Telavskaya opytnaya stantsiya (for
Rusiashvili, Gogvadze). 3. Moskovskoye otdeleniye Vsesoyuz-
nogo nauchno-issledovatel'skogo instituta rasteniyevodstva
(for Emerikh, Fedorova). 4. Severo-Zapadnyy nauchno-issledo-
vatel'skiy institut sel'skogo khozyaystva, Leningradskaya
obl. (for Titov).

TITOV, Konstantin Markovich; ZARUDNYY, N.N., otv. red.; MAZURKEVICH, M.,
red. izd-va; LEBEDEV, A., tekhn. red.

[Accounting for the clearing and credit operations of enterprises]
Uchet raschetnykh i kreditnykh operatsii predpriatii. Moskva,
Gosfinizdat, 1962. 69 p. (MIRA 16:2)
(Banks and banking--Accounting) (Clearinghouse)

SIBIRYAKOV, Leonid Yefimovich; VEYTSMAN, N.R., prof., red.; TATUR, S.K.,
prof., red.; SHCHENKOV, S.A., prof., red.; IVANOV, N.N., red.;
TITOV, K.M., red.; NIKOL'SKIY, A., red.; TELEGINA, T., tekhn.red.

[Accounting for the utilization of materials in production]
Uchet ispol'zovaniia materialov v proizvodstve. Moskva, Gos-
finizdat, 1961. 81 p. (MIRA 15:4)
(Accounting) (Materials)

SHCHENKOV, Serafim Aleksandrovich, prof.; VEYTSMAN, N.R., prof., red.;
TATUR, S.K., prof., red.; IVANOV, N.N., red.; TITOV, K.M., red.
KOROTKOVA, L., red.; LEBEDEV, A., tekhn. red.

[Principles of accounting in industry] Osnovy bukhgalterskogo
ucheta v promyshlennosti. Moskva, Gosfinizdat, 1962. 97 p.
(MIRA 15:6)

(Accounting)

1. TITOV, K. S.
2. USSR (600)
4. Turning
7. Mechanization of labor-consuming operations, Podshipnik, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

MILLIONSHCHIKOV, Anatoliy Dmitriyevich; SOROKIN, Valentin Alekseyevich;
KOZHUKH, Semen Arkad'yevich; TITOV, Konstantin Sergeyevich;
FILIPPOVA, E., red.

[Deductions from profit] Otchisleniia ot pribyli. Izd.3.,
perer. i dop. Moskva, Izd-vo "Finansy," 1964. 182 p.
(MIRA 17:6)

KOLOSOV, Aleksandr Gerasimovich; TITOV, Konstantin Sergeyevich;
FREYMAN, Tazara Iosifovna; MIROSHCHENKO, S., otv. red.

[Turnover tax on food products] Nalog s oborota po pre-
dovol'stvennym tovaram. Moskva, Finansy, 1965. 213 p.
(MIRA 18:5)

24890

S/109/61/006/008/010/018
D207/D304

24.3300

AUTHORS: Der-Shvarts, G.V., Kushnir, Yu.M. Rozenfel'd, L.B.,
Zaytsev, P.V., Bezlenkin, S.V., Trutneva, I.S.,
Belenkiy, S.A., Titov, L.A.

TITLE: Certain problems of reflex electron microscopy

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 8, 1961,
1358 - 1364

TEXT: This paper was presented at the 3rd All-Union Conference
on electron microscopy, Leningrad, October 1960. The present arti-
cle describes an electron reflex microscope based on the design by
Ch. Fert, R. Martv. R. Sanorte (Ref. 1: C. r. Acad. Sci. 1955, 240,
20, 1975) who have shown that by tilting the illumination system
by 15 - 20° in a reflex microscope, a good image may be obtained
with small deformation of the scale and a large useful image area.
The main deficiency of such a system in an electron microscope is
the chromatic aberration; the aberration can be reduced, by reduc-

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Certain problems of reflex ...

ing the diaphragm aperture of the objective which in turn reduces considerably the picture illumination. In the described microscope the increased illumination was obtained by designing a more effective electron gun and by utilizing a light intensifier. Since the definition of a reflex microscope is determined by the diaphragm of the objective, which means that in an electron microscope the efficiency of the electron gun is determined not by electron brightness but by the current density of the sample, several types of gun were investigated; it was found that triple electrode guns of special construction produce a much greater current density than the standard guns normally used in electron microscopes. The special feature of such a gun is the conical shape of the focussing electrode. The dependence of current density j at the cross-over point of the anode current was determined for electrode angles α of 60° , 90° and 120° with depth of penetration h of the tip of the cathode filament (filament dia. 0.12 mm) with respect to the cone apex, as a parameter for maximum current density at $U = 60$ kV. The temperature of the cathode was 2800°K . The optimum results obtained are

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shown. For an electrode with angle $\alpha = 120^\circ$, $h = 0.5$ mm; for $\alpha = 90^\circ$ and 60° , $h = 1.5$ mm. For comparison $j = f(I_a)$ is also drawn for the normal electron gun Y3M-100 (UHM-100), in which the tip of the filament is 0.75 mm above the focussing electrode. It may be seen that for $\alpha = 120^\circ$ the current density is increased by approximately 4.6 times with a current of 250 μ A and 7 times with a current of 500 μ A. The electron gun is mounted in the illumination system of the microscope. The gun is introduced through a jacketed port and can be mechanically rotated through any angle from 0° to 22° measured on a vernier scale. The electron optical magnification of the microscope is $\times 2500$, resolution about 500 \AA . The authors also undertook theoretical analysis of the influence on the finition of imperfect assembly and shape of magnet cores. Since the picture is formed by electrons undergoing considerable decelerations, the axial deformation of the magnet slots and errors in their axial positioning produce a constant magnetic field near the axis and perpendicular to it. Such a field has analyzing properties and may introduce chromatic aberration. The evaluation of such aberrations requires the determination of the corresponding pertur-

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Certain problems of reflex ...

bation potentials, normally evaluated by Bertein's method. It may be shown, however, that this method does not determine the exact boundary conditions necessary for solving the problem of the Laplace equation for perturbation potentials. This problem may be solved exactly only when it is assumed that the perturbation is very small. The modified Mathieu functions may be then reduced to the sums of Bessel functions, whose terms are multiplied by the parameter of the Mathieu equation. In their analysis the authors concluded that there is no general method for evaluating the perturbation potentials and used the integral of an ordinary layer to determine them in the near axial region. The details of the analysis are not given. The poles used had the geometrical form with s/d ratio of 1.5 [Abstractor's note: Symbols d and s not defined]. The authors also investigated the filter lenses in an attempt to increase the resolution of the reflex microscope. In their analysis [Abstractor's note: Details not given] they used the mathematical model of single electrostatic lenses of W. Glaser and P. Schiske (Ref. 13: Optik, 1954, 11, 9, 422; 1954, 11, 10, 455; 1955, 12, 5, 233) and of R. Rüdtenberg (Ref. 14: J. Franklin Inst. 1948, 246, 4,

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DE07/D304

Certain problems of reflex ...

311, 246, 5, 377). The analysis showed [Abstractor's note: Details not given] that the resolution of the lens is basically limited by the fact that non-axial achromatic electrons are being focused in different planes. With an energy spread of electrons of the order of 5-6 eV a background is, therefore formed in which the picture disappears. There are 10 figures, 5 Soviet-bloc and 9 non-Soviet-bloc references. The references to the 4 most recent English-language publications read as follows: M.E. Haine, P.A. Einstein, Brit. J. Appl. Phys 1952, 3, 2, 40; P.A. Starrock, Philos. Trans. Roy Soc. London, A, 1951, 243, 369, 387; G.D. Archard, J. Scient. Instrum. 1953, 30, 10, 353; R. Rudenberg, J. Franklin Inst., 1948, 246, 311; 246, 5, 377.

SUBMITTED: February 7, 1961

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BDS

ACCESSION NR: AP3007823

S/0048/63/027/009/1184/1187 57

AUTHOR: Rozenfel'd, L.B.; Kushnir, Yu.M.; Zaytsev, P.V.; Titov, L.A.; Bezlepkin, S.V.; Polyak, E.V. 55

18
TITLE: Reflecting electron microscope adapted for examination of strained specimens /Report, Fourth All-Union Conference on Electron Microscopy held in Sverdlovsk
12-14 March 1963/

SOURCE: AN SSSR, Izv.Ser.fizicheskaya, v.27, no.9, 1963, 1184-1187

TOPIC TAGS: electron microscopy, strain, strength of material

2/
ABSTRACT: The paper gives the results of testing a reflecting electron microscope adapted for observation of strained specimens. A reflecting electron microscope described earlier (Radiotekhnika i elektronika, No.8, 1359, 1961 and Zavodskaya laboratoriya, 27, 1528, 1961) with a maximum tilt angle of 22° was modified for this purpose by provision of a special object holder and incorporation of a two-slit projector lens to provide better resolution over the entire field. The optimum shape for the specimens was found on the basis of extensive experimentation; this is shown in Figure 1 of the Enclosure. The specimen holder and straining de-

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ACCESSION NR: AP3007823

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vice is shown in Figure 2. The strain is applied by means of a synchronous electric motor rotating the screw shaft. The deformation process was recorded by internal photography and by photography (still and motion picture) of a glass screen mounted in the bottom of the internal camera and viewed by means of a mirror. A series of four micrographs of the surface of a specimen of heat-resisting alloy, lightly etched before straining, is reproduced. The electron micrographs reveal some details not disclosed by an optical microscope. "In conclusion, the authors express their gratitude to G.V.Der-Shvarts and V.P.Rachkov for calculation of the two-slit achromatic projector lens." Orig.art.has: 4 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 07Oct63

ENCL: 01

SUB CODE: ML, SD

NO REF SOV: 002

OTHER: 000

Card2/8 21

DYMIK, I.B., kand. med. nauk; TITOV, I.B.

Diagnosis of arteriovenous aneurysms of the lung. Vest. rent.
i rad. 40 no.3:29-32 My-se '65. (MIRA 18:7)

1. Kafedra gosptal'noy khirurgii (zav. - chlen-korrespondent
AMN SSSR prof. B.A. Korolev) i kafedra rentgeno-radiologii
(zav. - dotsent N.Ye. Yekhtov) Gor'kovskogo meditsinskogo
inst.tuta.

... L.B.

Differential diagnosis of collagen diseases and pulmonary tuberculosis. Prob. tub. no. 14246. 1955. (1955-1961)

1. Defekt meditsinskoy radiologii i rentgenologii (defect of medical radiology and radiology) ... doctor
2. Defekt Gor'kovskogo meditsinskogo instituta (defect of Gorkovskogo medical institute) ... doctor
3. Defekt protivotuberkuleznyy dispanser (defect of anti-tuberculosis dispensary) ... doctor

TITOV, L

F

"Calculating the Degree of wave Disturbance According to Empirical Formulae,"
Works of Sciences Institution of the Main Administration of the Hydro-
meteorological Service USSR, Series V, No 12, 1946 (189-211).

TITOV, L. F.

Titov, L. F., Noye Shkaly Stepeni Volneniia i sostoiianiia moria. (New Scales for Sea Swell and State of Sea.) Meteorologiya i Gidrologiya, No. 5, 23-28, 1952.
3 TABLES,

After critical remarks on the present scales of sea swell, the author presents three scales for more accurate determination of swell processes. The values of minimal depth of sea are given in tables, for each gradation of the scale, because the intensity of swell processes depends on the sea depth. Subject headings. Ocean swell, Ocean waves.

Leningrad Dept of State Oceanographic Inst.

TITOV, Lev Fedorovich; PREEOBRAZHENSKIY, Yu.V., redaktor; LEONOVA, B.I.,
redaktor; SOLOVEYCHIK, A.A., tekhnicheskii redaktor.

[Ocean and sea waves produced by the wind] Vetrovye volny na
okeanakh i moriakh. Leningrad, Gidrometeorologicheskoe izd-vo,
1955. 126 p. (Waves) (MLRA 9:6)

SOV/50-58-9-13/19

TITOV, L. F.

"On Formulae for the Computation of Elements of Maritime Wind Waves" (0 formulakh
dlya rascheta elementov morskikh vetrovykh voln)
Meteorologiya i gidrologiya, 1958, Nr 9, pp. 38-41 (USSR)

I. S. Brovikov and Yu. M. Krylov (ref 1) subject to a critical analysis the formulae (refs 6,7) proposed by the author for the purpose indicated in the title. However, the two latter works by the author do not contain any material for a criticism of this kind. On the other hand, the author has published a number of other papers, which are not taken into consideration by the reviewers. It is, however, these papers by the author (for instance in ref. 8) which contain a detailed derivation of the formulae recommended by the author. Yu. M. Krylov, who in reference 1, tries to prove the inapplicability of the author's formulae, arrives at entirely opposite conclusions in another paper (ref 4). Furthermore, the authors of ref. 1 (pg. 41) compare the computations by the formulae criticized by them with Darbishir's empirical formula. As a result, waves computed by the above-mentioned formula appear half as high as those computed by Darbishir's formula. From this fact the two critics infer to the erroneousness of the formulae proposed. However, the author claims that the continuous application, for a period of 7 yrs, of the criticized formulae, to the practical work of the hydro-meteorological service, would undoubtedly have revealed errors of this size. On the other hand, the experience gained in practical work has shown that computations by the formulae under discussion are in most satisfactory agreement with direct observations. The author wonders why one single foreign empirical formula should be given absolute preference, and why the experience of domestic researchers should be utterly ignored. There are 2 figure and 16 references, 14 of which are Soviet.

TITOV, L.F.

Principal problems in the study of wind waves and ways of solving
them. Trudy Okean kom. 9:7-17 '60. (MIRA 14:1)
(Waves)

TITOV, L.F.; SOLNTSEVA, N.O.; PISAREVSKAYA, V.D.

Calculation of fluctuations of the level of the sea during a period
of storms in the western Gulf of Finland. Trudy GOIN no.69:28-45
'62. (MIRA 15:11)

(Finland, Gulf of--Oceanography)

07174

5.3700

2209, 1273, 1274

S/189/60/000/003/009/013/XX
B003/B067

AUTHORS:

Chzuan Ya - uy, Savich, I. A., Lapitskiy, A. V.,
Samorukov, V. R., Titov, L. G.

TITLE:

Inner Complex Compounds of Titanium, Zirconium, Niobium,
and Tantalum With Certain Schiff Bases

PERIODICAL:

Vestnik Moskovskogo universiteta. Seriya 2, khimiya, 1960, 15-
No. 3, pp. 40-45

TEXT: The present paper describes the complex compounds of the elements Ti, Zr, Nb and Ta with Schiff bases. The initial substances were: titanium tetrachloride, zirconium oxychloride (produced from zirconium sulfate), the pentachlorides of niobium and of tantalum (produced from the pentoxides (Ref. 4)) and the Schiff bases disalicylal dianisidine, di-(3-methyl-2-hydroxy-benzal)-dianisidine, di(5-bromo-2-hydroxy-benzal)-dianisidine (these compounds were synthesized by the author for the first time) (Table 2) and 12 further substances (Table 1). Carbon tetrachloride and chloroform (both purified, dehydrated, and distilled above phosphorous pentoxide were used as solvents). Titanium complexes:

Card 1/3

85754

Inner Complex Compounds of Titanium,
Zirconium, Niobium, and Tantalum With
Certain Schiff Bases

S/189/60/000/003/009/013/XX
B003/B067

CCl_4 -solutions of TiCl_4 and the Schiff basis concerned were mixed at a molar ratio of 1:2 and 1:1, respectively. The precipitates obtained were washed with absolute ether for three to four hours in the Soxhlet apparatus and dried at 90°C . The analysis of the compounds obtained was made by determining titanium (as TiO_2), nitrogen (according to Dumas), chlorine (as AgCl). Table 3 shows the results of the analyses and the properties of the compound. The following was obtained: Ti-salicylal metanitroanilate, Ti-salicylal aminopyridinate, Ti-salicylal para-iodoanilate, Ti-2-(4-methyl-2-hydroxybenzalamino)-pyridinate, Ti-3,5-dibromo-2-salicylal aminopyridinate, Ti-5-bromo-2-hydroxybenzal anilate, Ti-3,5-dichloro-2-salicylal aminopyridinate, Ti-5-chloro-2-(5-bromo-2-hydroxybenzal aminopyridinate, Ti-5-chloro-2-salicylal aminopyridinate), Ti-5-bromo-2-hydroxybenzal metanitroanilate, Ti-disalicylal ethylene-diiminate, Ti-2,6-disalicylal aminopyridinate, Ti-disalicylal-o,o-dianisidine. Zirconium complexes: Well definable compounds could be obtained only under the action of solutions of disalicylal dianisidine in dioxane on a 90% zirconium oxychloride solution. The analysis was the same as for

Card 2/3

Inner Complex Compounds of Titanium,
Zirconium, Niobium, and Tantalum With
Certain Schiff Bases

S/189/60/000/003/009/013/XX
B003/B067

titanium compounds (Table 3). Zr-disalicylal-o,o-dianisidinate was obtained. The niobium and tantalum complexes were obtained in the same manner as the titanium complexes. The following was obtained: Nb-disalicylal ethylenediiminate, Nb-salicylal paraiodoanilate, and the two analogous Ta compounds. All complex compounds are insoluble or difficultly soluble in organic solvents. Table 4 gives the results obtained with 32 different organic solvents. The complexes are hydrolyzed in water. The physico-chemical properties of the complexes will be dealt with in another paper. Among others the papers by V. I. Kuznetsov (Refs. 1,2) and A. P. Terent'yev (Ref. 9) are mentioned. There are 4 tables and 13 references: 7 Soviet, 5 German, and 1 US.

ASSOCIATION: Moskovskiy universitet, Kafedra radiokhimii (Moscow
University, Chair of Radiochemistry)

SUBMITTED: September 26, 1959

Card 3/3

LaSSR

DQ-681

-4-

26 Nov 60

A resolution, Sup Sov, LaSSR, appointed the following
to the newly organized Budget-Economic Commission,
Sup Sov, LaSSR:

Mbrs:

[Cont from card 3, see PIKHELS, V. S., same date]

STRAUTMAN, Petr Yekabovich, dep from Krimunskiy 112th e.o.;

TITOV, Login Pavlovich, dep from Svarinskiy 106th e.o.;

SHITS, Karl Laurovich, dep from Riga 33rd e.o.;

EYSAKS, Kazimir Aloizovich, dep from Vandzenskiy 184th e.o.

[End of series]
Sovetskaya Latviya, 2 Dec 60

27
(4)
bz

ZHURAVLEV, L.T.; ZUBAREV, A.F.; POLYAKOV, A.L.; TITOV, L.N.

Electrical manometer continuously recording low gas and vapor pressures. Zhur. fiz. khim. 39 no. 1:236-239 Ja '65
(MIRA 19:1)

1. Institut fizicheskoy khimii AN SSSR i Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova. Submitted September 4, 1963.

L 34977-65

ACCESSION NR: AP5004363

5/0076/65/032/001/0236/0239

AUTHOR: Zhuravlev, L. T.; Zubarev, A. F.; Polyakov, A. L.; Titov, L. N. 13
11

TITLE: An electronic recording manometer for low pressures in gases and vapors 15

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 1, 1965, 236-239

TOPIC TAGS: manometer, recording manometer, vapor pressure

ABSTRACTS: The purpose of this work was to design a sensitive recording manometer. The main part of the instrument is the resistance bridge shown in Figure 1 of the Enclosure. The arms with thin incandescent platinum filaments 1,1' and 2,2' are the sensing elements. When the mean free molecular path becomes approximately the same or greater than the diameter of the filament, the transfer of heat to the filament and consequently the electrical resistance of the filament are functions of gas pressure. If the resistance in reference arms 2,2' is kept constant by maintaining a constant known gas pressure in these elements, then the imbalance in the bridge due to changes in the resistance of filaments 1,1' may be found in changes of gas pressure in the system connected to arms 1,1'. The temperature of the filaments is maintained at 200 - 300° C. The article shows the basic a.c. amplifier circuit and scale switch. The vacuum system of this manometer is shown in Card 1/4

L 34977-65

ACCESSION NR: AP5004363

2
Figure 2 of the Enclosure. Arms 1,1' and 2,2' are kept in a thermostat operating at $+32 \pm 0.02^\circ \text{C}$. Calibration of this manometer with the water vapor pressure on the least sensitive scale of the instrument shows that the sensitivity of the recording potentiometer is about 0.02 mm Hg per mm of recorder deflection. On the most sensitive scale setting of the manometer its sensitivity is increased by one order of magnitude to approximately 0.002 mm Hg per mm deflection. The upper limit was experimentally found to be 15 - 20 mm Hg. Above these pressures the manometer loses its sensitivity. Orig. art. has: 5 figures.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences SSSR); Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 04Sep63

ENCL: 02

SUB CODE: ME. GC

NO REF SOV: 003

OTHER: 002

Card 2/4

L 34977-65

ACCESSION NR: AP5004363

ENCLOSURE: 01

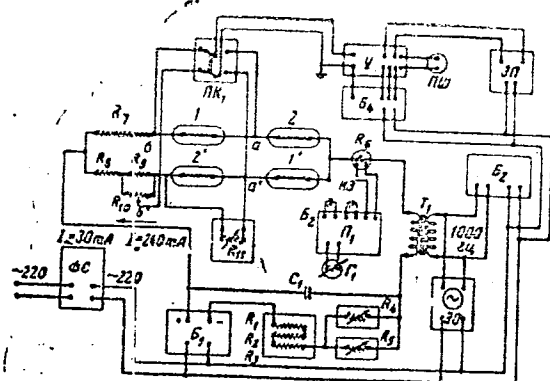


Fig. 1. Schematic diagram of the manometer: 1,1', 2,2'--bridge arms

$R_1 = 420$ ohms, $R_2 = 470$ ohms, $R_3 = 250$ ohms, $R_4 = 1500$ ohms (variable), $R_5 = 100$ ohms (variable), $R_6 = 0.1$ ohm, $R_7 = 52$ ohms, $R_8 = 42$ ohms, $R_9 = 10$ ohms, $R_{10} = 1000$ ohms (variable), $R_{11} = 10,000$ ohms (variable), $C_1 = 1\mu f$

Card 3/4

L 34977-65

ACCESSION NR: AP5004363

ENCLOSURE: 02

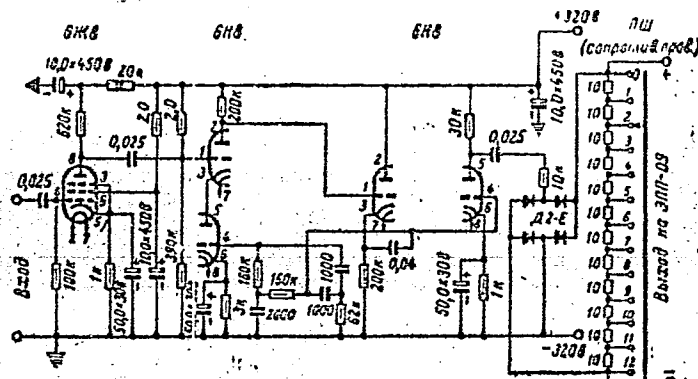


Fig. 2. Vacuum system of the manometer: 1,1', 2,2' -- bridge arms
3, 4 -- copper block and housing of the liquid thermostat (+32°C);
5 -- Beckmann thermometer; 6, 7 -- copper rods; 8 -- ice thermo-
stat; 9-14, 17-19 -- vacuum stopcocks; 15, 16 -- traps; 20 --
ampules with adsorbent; 21 -- furnace; 22 -- circulating pump

Card 4/4

S/020/63/149/003/022/028
B192/B102

AUTHORS: Mikheyeva, V. I., Titov, L. V.

TITLE: On the solubility of sodium boronhydride in pyridine

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 3, 1963, 609-610

TEXT: The solubility of NaBH_4 in pyridine was investigated between -44.5° and $+75^\circ\text{C}$. The melting temperature of pyridine decreases considerably if NaBH_4 is added and the crystallization line of pure pyridine terminates on the eutectic point at -44.5°C with a concentration of about 1.0 weight percent NaBH_4 . The eutectic is followed by the crystallization line of $\text{NaBH}_4 \cdot 3\text{Py}$ which ends at -4.7°C and 6.8 weight percent NaBH_4 and corresponds to the reaction equilibrium $\text{NaBH}_4 \cdot 2.5\text{Py} \rightleftharpoons \text{NaBH}_4 + \text{solution}$. Ultimately the crystallization line of the solvate $\text{NaBH}_4 \cdot 2.5\text{Py}$ ends at the point $+5^\circ\text{C}$ and 8.1 weight percent NaBH_4 and corresponds to the peritectic equilibrium $\text{NaBH}_4 \cdot 2.5\text{Py} \rightleftharpoons \text{NaBH}_4 + \text{solution}$. Above this point the NaBH_4 not

Card 1/2

On the solubility of sodium ...

S/020/63/149/003/022/028
B192/B102

solvated crystallizes out of the saturated solution. The solubility of NaBH_4 in pyridine increases from 1.0 weight percent at -44.5°C to its maximum value of 8.1 weight percent at $+5^\circ\text{C}$ with increasing temperature; above this temperature it rapidly drops to 2.3 weight percent at $+75^\circ\text{C}$. The same dependence of the solubility on the temperature has been observed with the system Diglim - sodium borohydride and a series of water-salt systems. It is assumed that the solvation of the molecules of the solvent within a narrow range of temperature and the decomposition of solvates when the temperature is increased are responsible for this behavior. There is 1 figure.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences USSR)

PRESENTED: November 21, 1962, by I. I. Chernyayev, Academician

SUBMITTED: November 13, 1962

Card 2/2

ACCESSION NR: AP4019493

S/0078/64/009/003/0682/0687

AUTHORS: Mikheyeva, V. I.; Titov, L. V.

TITLE: The pyridine--sodium borohydride system

SOURCE: Zhurnal neorg. khimii, v. 9, no. 3, 1964, 682-687

TOPIC TAGS: pyridine sodium borohydride system, pyridine isopropanol sodium borohydride, sodium borohydride, solubility, borohydride production, solubility diagram, $\text{NaBH}_4 \cdot 3\text{pyridine}$ complex, $\text{NaBH}_4 \cdot 2.5$ pyridine complex

ABSTRACT: The solubility of NaBH_4 in anhydrous pyridine was investigated to determine the suitability of pyridine as the solvent in the synthesis of other borohydrides by exchange reaction between NaBH_4 and inorganic salts. The composition of the crystallized solid phases was also determined. From the solubility diagram (fig. 1) it is seen that the NaBH_4 -pyridine (Py) system is characterized by the formation of 2 solvates formed by peritectic reactions: $\text{NaBH}_4 \cdot 3\text{Py}$ at -4.7°C and 7% NaBH_4 ; and $\text{NaBH}_4 \cdot 2.5\text{Py}$ at 5°C and 8% NaBH_4 . The maximum solubility

Card 1/4

ACCESSION NR: AP4019493

of NaBH_4 in pyridine is 8% at 5°C; it decreases with increase or decrease in temperature. In the diagram, AB represents Py crystallization; BC is the crystallosolvate $\text{NaBH}_4 \cdot 3\text{Py}$; and CD, the second solvate $\text{NaBH}_4 \cdot 2.5\text{Py}$. At point D the second solvate decomposes; after that the solubility of NaBH_4 starts to fall rapidly with increasing temperature. The equilibrium at point C may be represented by the reaction $\text{NaBH}_4 \cdot 3\text{Py} \rightleftharpoons \text{NaBH}_4 \cdot 2.5\text{Py} + \text{solution}$, and at D by: $\text{NaBH}_4 \cdot 2.5\text{Py} \rightleftharpoons \text{NaBH}_4 + \text{solution}$. The solubility of NaBH_4 in pyridine-isopropanol solvent systems was investigated (fig. 2). At 18°C the solubility of NaBH_4 is reduced gradually from 7.2% in pure pyridine to 0.4% in pure isopropanol. The NaBH_4 crystallized from these systems is nonsolvated. Orig. art. has: 2 figures and 4 tables.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova, Akademii nauk SSSR (Institute of General and Inorganic Chemistry, Academy of Sciences SSSR)

SUBMITTED: 12Apr63

DATE ACQ: 31Mar64

ENCL: 02

SUB CODE: CH, PH

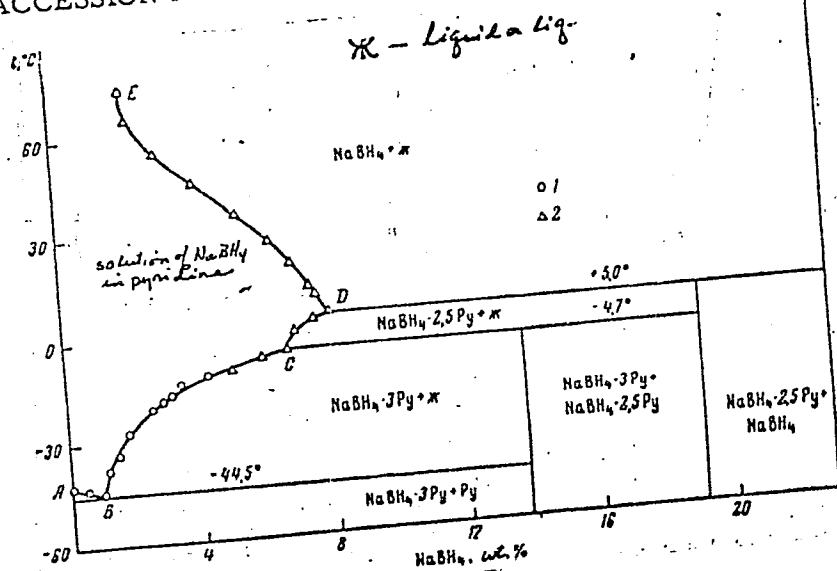
NR REF SOV: 004

OTHER: 008

Card 2/4

ACCESSION NR: AP4019493

ENCLOSURE: 01



Card 3/4

ACCESSION NR: AP4019493

ENCLOSURE: 02

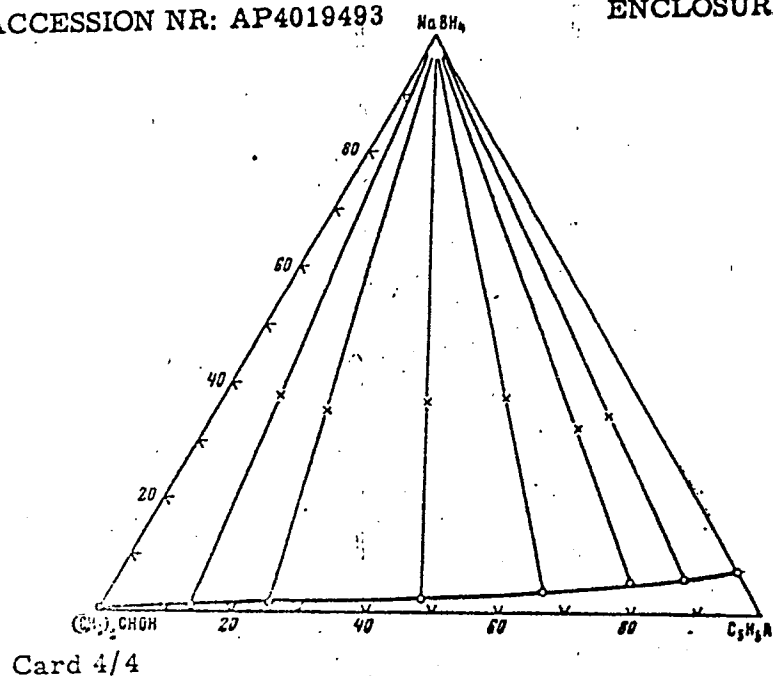


fig. 2

Solubility isotherm of the
pyridine-isopropanol-so-
dium borohydride system
at 18C.

ACCESSION NR: AP4029183

S/0078/64/009/004/0794/0798

AUTHOR: Mikheyeva, V. I.; Titov, L. V.

TITLE: Solubility of calcium borohydride in tetrahydrofuran

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 4, 1964, 794-798

TOPIC TAGS: calcium borohydride, solubility, tetrahydrofuran, calcium borohydride tetrahydrofuran solvate, solubility polytherm, solvate property, thermogram, nonsolvated calcium borohydride

ABSTRACT: The solubility of calcium borohydride in tetrahydrofuran (THF) was investigated from -107.5 to 50°C. The solubility polytherm consists of a crystallization line for the $\text{Ca}(\text{BH}_4)_2 \cdot 4\text{THF}$ solvate from -107.5 to 28.6°C, and above 28.6°C, of the solvate $\text{Ca}(\text{BH}_4)_2 \cdot 2\text{THF}$ (fig. 1). Microphotographs of the crystals are included; these were taken with the aid of a thermostatic cuvette consisting of two glass cylinders constructed by I. M. Yeremenko (fig. 2). Some of the properties of the two solvates were investigated; their thermo-

Card 1/5

ACCESSION NR: AP4029183

grams were constructed (fig. 3). $\text{Ca}(\text{BH}_4)_2 \cdot 4\text{THF}$ crystallized in the triclinic system. The five endothermic effects were identified: (1) melting of the compound, (2) elimination of two molecules of solvent, (3) melting of the $\text{Ca}(\text{BH}_4)_2 \cdot 2\text{THF}$ (4) elimination of the remaining two molecules of solvent (5) thermal decomposition of $\text{Ca}(\text{BH}_4)_2$. $\text{Ca}(\text{BH}_4)_2 \cdot 2\text{THF}$ is stable in dry air, water-soluble without decomposition, and crystallizes in the rhombic system. Orig. art. has: 5 figures and 3 tables

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR Laboratoriya perekisnykh soyedineniy (Institute of General and Inorganic Chemistry, Academy of Sciences SSSR, Laboratory of Peroxide Compounds)

SUBMITTED: 22Sep63

DATE ACQ: 29Apr64

ENCL: 03

SUB CODE: CH

NC REF SOV: 002

OTHER: 001

Card 2/5

ENCLOSURE: 01

ACCESSION NR: AP4029183

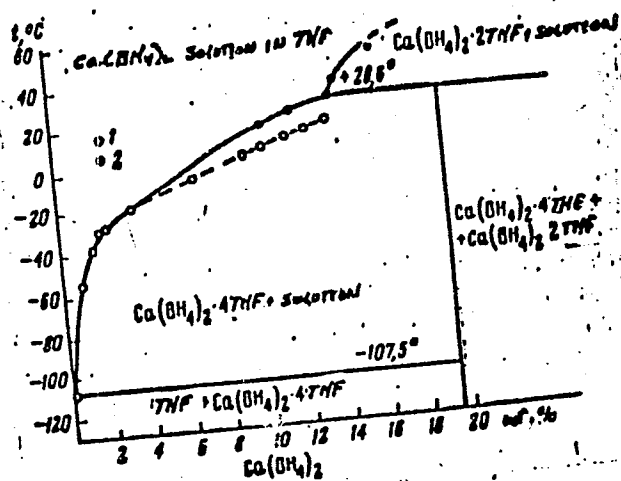


fig. 1

Solubility polytherm of calcium borohydride in tetrahydrofuran. 1--data by the visual-polythermic method; 2--data by the solubility method
Card 3/5

ACCESSION NR: AP4029183

ENCLOSURE: 02

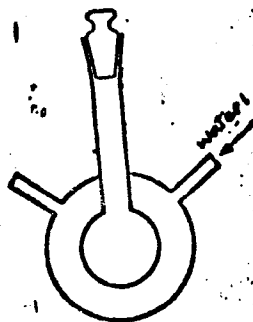


fig. 2
Thermostatic cuvette for photographing crystals

Card 4/5

ENCLOSURE:

ACCESSION NR: AP4029183

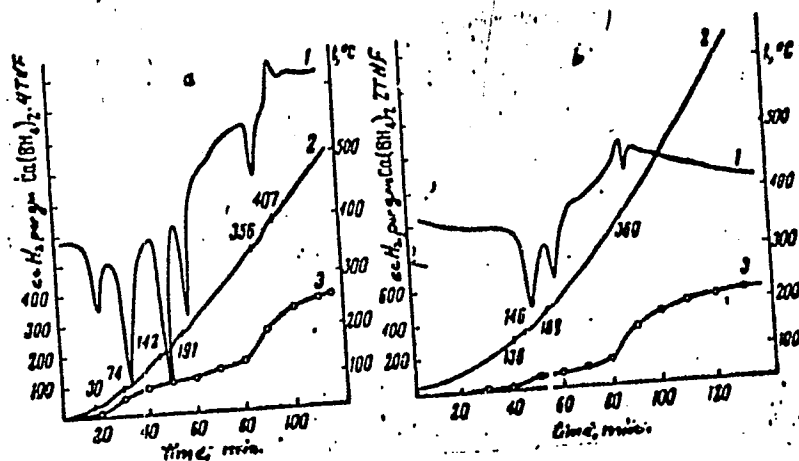


fig. 3
Thermograms (1, 2) Ca(BH₄)₂·4THF (a) and Ca(BH₄)₂·2THF (b),
together with hydrogen evolution curve (3)

Card 5/5

ACCESSION NR: AP4029182

S/0078/64/009/004/0789/0793

AUTHOR: Mikheyeva, V. I.; Titov, L. V.

TITLE: Calcium borohydride

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 4, 1964, 789-793

TOPIC TAGS: calcium borohydride, preparation, purification, exchange reaction, calcium borohydride tetrahydrofuran solvate, nonsolvated calcium borohydride, calcium borohydride pyridine complex

ABSTRACT: The preparation of $\text{Ca}(\text{BH}_4)_2$ by the exchange reaction $\text{CaCl}_2 + 2\text{NaBH}_4 = \text{Ca}(\text{BH}_4)_2 + 2\text{NaCl}$ in pyridine was investigated. By extracting the obtained precipitate with tetrahydrofuran (THF) the calcium borohydride was obtained as the solvate $\text{Ca}(\text{BH}_4)_2 \cdot 2\text{THF}$ in 99.5% purity. Nonsolvated $\text{Ca}(\text{BH}_4)_2$ may be obtained by heating the solvate to 190°C under vacuum. The purity of the product $\text{Ca}(\text{BH}_4)_2$ increased with increase in the $\text{NaBH}_4/\text{CaCl}_2$ reactant ratio: with ratio of 2.5:1 86% purity was attained. 95% purity may be achieved by re-

Card 1/4

ACCESSION NR: AP4029182

crystalizing from THF and reheating. $\text{Ca}(\text{BH}_4)_2$ is thermally much less stable than the alkali borohydrides; it starts to decompose at 245C and is almost completely decomposed at 350C (fig. 1). Since $\text{Ca}(\text{BH}_4)_2$ is very soluble in H_2O and THF, reactions with the compound may be readily carried out in these solvents. $\text{Ca}(\text{BH}_4)_2$ is almost insoluble in pyridine (only 0.5 wt. % solubility), forming $\text{Ca}(\text{BH}_4)_2 \cdot 7\text{Py}$. The thermogram (fig. 2) of this complex shows a number of endothermic effects the first of which is due to incongruent fusion of $\text{Ca}(\text{BH}_4)_2 \cdot 7\text{Py}$. Orig. art. has: 2 figures, 1 table and 4 equations.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR Laboratoriya khimii gidridov i bora (Institute of General and Inorganic Chemistry, Academy of Sciences, Laboratory of Hydrides and Boron)

SUBMITTED: 22Sept63
SUB CODE: CH

DATE ACQ: 29Apr64
NO REF SOV: 010

ENCL: 02
OTHER: 005

Card 2/4

TITOV, L.V.

Synthesis of calcium borohydride. Dokl. AN SSSR 154 no. 3:654-656 Ja '64. (MIRA 17:5)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova AN SSSR. Predstavleno akademikom N.M.Zhavoronkovym.

The sum of the rotating states of an asymmetric spin
 I. N. Godnev, ~~Mos~~ Titov and P. Shishakov. *Tran.*
Inst. Chem. Tech. Ivanovo (U. S. S. R.) 1940, No. 4,
 28-30.—The derivation of the sum of the rotating states
 is based on the use of approximated energy levels found by
 means of quantum mechanics. The values obtained are
 close to those obtained by a direct addn. Eleven refer-
 ences.

W. R. Henn

TITOV, M.; ESTATOVA, Ye.

Organization and personnel of commodity-handling departments of
petroleum refineries. Neftianik 7 no.2:26 F '62. (MIRA 15:2)

1. TSentral'noye byuro promyshlennykh normativov po trudu.
(Petroleum—Refining)

TITOV, M.; LEYTMAN, B.

Technological progress in the chemical industry and material incentives. Sots. trud 8 no.12:61-64 D '63.

(MIRA 17:2)

1. Nachal'nik otдела truda i zarabotnoy platy Gosudarstvennogo komiteta khimicheskoy i neftyanoy promyshlennosti (for Titov). 2. Nachal'nik laboratorii Gosudarstvennogo instituta azotnoy promyshlennosti (for Leytman).

TITOV, M.

Following the example of textile workers. Okhr. truda i sots strakh.4
no.1:20-21 Ja '61. (MIRA 14:3)

1. Predsedatel' komissii okhrany truda na Vyazemskom mashinostroitel'-
nom zavode.

(Vyz'ma—Machinery industry—Hygienic aspects)

TITOV, M.; ESTATOVA, Ye.

Norms for the number of workers in the auxiliary units of
petroleum refinery plants. Biul.nauch.inform.: trud i zar.plata
3 no.5:30-33 '60. (MIRA 13:8)
(Petroleum—Refining)

TITOV, M.; KUCHEVSKAYA, F.

Calculating production norms for the work on semiautomatic devices. Biul.rauch.inform.; trud i zar.plata 3 no.6:17-20
(MIRA 13:6)

'60.

(Glass blowing and working--Production standards)

PREMYSLER, V.; TITOV, M.

Improve the quality of machinery and equipment. Muk.-elev.
prom. 25 no.9:30-31 S '59. (MIRA 12:12)

1. Glavnyy inzhener Belotserkovskogo krupozavoda No.23 (for
Premysler). 2. Glavnyy inzhener Petropavlovskogo mel'kombi-
nata (for Titov).

(Grain elevators--Equipment and supplies)

(Grain-milling machinery)

TITOV, M., podpolkovnik.

The soldier in an offensive. Voen.znan.31 no.9:14-15 S '55.
(Attack and defense (Military science)) (MLRA 9:2)

TITOV, M.A., inzh.

New equipment for concrete construction abroad. Stroi.i dor.mash.
6 no.4:37-38 Ap. '61. (MIRA 14:3)
(Concrete mixers)

BARNA, van Fedorovich; OGIYEVICH, Vladimir Alekseyevich, kand. tekhn. nauk; TITOV, Mikhail Aleksandrovich; KASITSYNA, A.N., inzh., red.

[Automated plant producing concrete and mortar mixes; practices of the "Khimmetallurgstroï" Trust of the Main Construction Administration of the City of Lvov of the Ministry of Construction of the U.S.S.R. and the All-Union Scientific Research Institute of Construction Equipment] Zavod-avtomat betonnykh i rastvornnykh smesey; opyt tresta "Khimmetallurgstroï" Glavstavstroia Ministerstva stroitel'stva USSR i VNIISTroidormasha. Moskva, Gosstroizdat, 1963. 36 p. (MIRA 17:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.
2. Glavshiy inzhener po avtomatike tresta "Khimmetallurgstroy (for Barna).
3. Nachal'nik otдела oborudovaniya betonnykh rabot Vsesoyuznogo nauchno-issledovatel'skogo instituta stroitel'nogo i dorozhnogo mashinostroyeniya (for Ogiyevich).

BARTSAL, N.A.; BAU, M.M.; TITOV, M.A.

Automatic weighing unit for loading motor vehicles with loose
materials. Priborostroenie no. 12:29 D '60. (MIRA 14:1)
(Weighing machines) (Loading and unloading)

ACC NR: AT6024285

SOURCE CODE: UR/2976/66/000/005/0177/0183

AUTHOR: Belov, B. I.; Norenkov, I. P.; Titov, M. A.

ORG: none

TITLE: Operational and reliability characteristics for the "Ural 2" digital computer

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. Vychislitel'naya tekhnika, no. 5, 1966, 177-183

TOPIC TAGS: system reliability, reliability engineering, digital computer

ABSTRACT: The operation and reliability characteristics of the Ural 2 computer are discussed. The computer was used in the Computing Laboratory of MVTU im. Bauman (Vychislitel'naya laboratoriya MVTU). The time spent on maintenance of four Ural 2 computers in different installations differed by as much as 350%. This discrepancy is assigned to the difference in the statistical methods used to evaluate their performance, environmental factors, and habits of operating personnel. Reliability figures are presented for the Ural 2 computer at MVTU for 1963 and 1964 in which the low reliability period associated with the initial break-in period after installation (1961) was excluded. The location, number and cause of computer failure is shown for the period from May 1963 to April 1964 (total operating time: 3060 hr). The mean time between failures (MTBF) due to electronic, electromechanical, and accidental failures was 22.5, 37, and 37 hrs. If the power supply failures are excluded from the first figure the corresponding MTBF due to electronic causes increases to

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50 hrs. During the first 4 months of 1964 the average computer availability constituted 84% of the total time. The authors propose certain modifications for the more efficient preventive schedules and procedures. Orig. art. has: 3 tables.

SUB CODE: 409/ SUBM DATE: none

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ACC NR: AT6024286

SOURCE CODE: UR/2976/66/000/005/0201/0210

AUTHOR: Titov, M. A.; Surkov, L. V.; Ivanov, S. R.

ORG: none

TITLE: The problem of repairability of electronic digital computers

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. Vychislitel'naya tekhnika, no. 5, 1966, 201-210

TOPIC TAGS: system reliability, reliability engineering, computer design, digital computer

ABSTRACT: In the overall digital computer ²⁵reliability ¹⁴estimates the repairability factors such as the detection, removal, and prevention of failures must be included in the analysis. These in turn do not depend on the computer system organization above, but also on the capability of the maintenance personnel. The design of a computer system with a specific repairability figure is difficult since the statistical data for the new system is not available a priori. The authors make an attempt to correlate certain experience gained during the operation of a Ural-2 computer with the repairability design parameters for inclusion in future designs. Thus, the computer availability time is related to the mean restorability time which in turn is shown to depend on a number of factors: computer functional organization (i.e. whether provisions are made for executing test programs), amount of equipment redundancy and built in control circuitry, location of fault indicators,

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ACC NR: AT6024286

structural organization (i.e. whether the structure is modular and access to measuring and test equipment is easy), organization of maintenance routines and schedules, and the qualification of maintenance personnel. Orig. art. has: 2 tables.

SUB CODE: 0914/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 002

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TITOV, M.A., inzh.

Automatic traffic counter. Mekh.i avtom.proizv. 14 no.11:55-57 H
'60. (MIRA 13:11)

(Traffic surveys)

OGIYEVICH, V.A., kand.tekhn.nauk; BAU, M.M., inzh.; MAYORCHUK, A.Z., inzh.
TITOV, M.A., inzh.

Automatic concrete plants. Mekh.stroi. 18 no.9:18-22 S '61.
(Concrete plants) (MIRA 14:10)

TITOV, M.A., inzh.

Improved level indicators to be used in loading bins. Mekh.
stro1. 17 no.4:25-26 Ap '60. (MIRA 13:6)
(Level indicators)

25(2)

SOV/100-59-5-14/14

AUTHORS: Ogiyevich, V.A., Candidate of Technical Sciences, and Titov, M.A., Engineer

TITLE: Weighing Devices

PERIODICAL: Mekhanizatsiya stroitel'stva, 1959, Nr 5, pp 31-33 (USSR)

ABSTRACT: The article describes the system of automatic weighing of loose material as developed by the firm Toledo in USA.
There are 6 photos.

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TITOV, M.A., inzh.

Level indicator with a tester. Stroil. i dor.mashinostr. 4
no.6:36-37 Je '59. (MIRA 12:8)
(Electric instruments)

OGIYEVICH, V.A., kand.tekhn.nauk; TITOV, M.A., inzh.

Program-controlled electric tensiometric dosing tank. Stroi.i
dor.mashinostr. 4 no.9:23-28 S '59. (MIRA 12:11)
(Concrete mixers)

OGIYEVICH, V.A., kandidat tekhnicheskikh nauk; TITOV, M.A., inzhener.

New system of automatic control for concrete plants. Stroi.i dor.
mashinostr.no.1:18-23 Ja '57. (MLRA 10:2)
(Automatic control) (Concrete plants)

OGIYEVICH, V.A., kandidat tekhnicheskikh nauk; TITOV, M.A., inzhener;
MEDVEDEV, R.I., inzhener.

Operating photoelectronic batching tanks. Stroi. i dor. mashinostr.
2 no.6:30-32 Je '57. (MLRA 10:6)
(Electronic control) (Mixing machinery)

OGIYEVICH, V.A., kandidat tekhnicheskikh nauk; TITOV, M.A., inzhener.

New automatic batcher with photoelectric control system. Mekh.stroi.
13 no.5:6-11 My '56. (MLBA 9:8)

(Dispensing apparatus) (Automatic control)

TITOV, M.A. ... insh.

Hoists used for intershop transportation, loading and unloading
in storerooms. Stroil.i dor.mashinostr. № no.5:36-37 My '59.
(MIRA 12:7)

(Hoisting machinery)

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SOV/100-59-10-12/12

AUTHOR: Titov, M.A., Engineer

TITLE: Extracts from Foreign Periodicals

PERIODICAL: Mekhanizatsiya stroitel'stva, 1959, Nr 10, pp 32-33 (USSR)

ABSTRACT: The article contains 7 references to articles contained in German periodicals dealing with modern construction machines. Besides giving a brief description of the machines it also mentions the names of the makers.

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